AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application.

Listing of Claims:

128. (Currently Amended) A bioresorbable implant composition, comprising: a calcium phosphate; and

an agent which directly or indirectly stimulates osteoclast activity, wherein the agent recognizes the calcium phosphate as a substrate to thereby modulate modulates the resorption of the calcium phosphate at an implant site; and

a biologically active agent.

129. (Cancelled)

- 130. (Previously Presented) The implant composition of claim 128 wherein the agent is selected from the group consisting of interleukin-1, colony stimulating factors, macrophage-colony stimulating factors, transforming growth factor α, tumor necrosis factor, interleukin-6, interleukin-11, interleukin-3, para-thyroid hormone, vitamin D metabolites, prostaglandins, and oxygen free radicals.
- 131. (Previously Presented) The implant composition of claim 128 further comprising at least one bone-resorbing cell.

least one bone-resorbing cell is selected from the group consisting of a progenitor cell, a stem cell, an osteocyte, an osteoclast, an osteoblast, a chondrocyte, a macrophage, a myoblast, a fibroblast, a bone- or cartilage-producing cell, a muscle cell, an hepatocyte, a parenchymal cell, a cell of intestinal origin, a nerve cell, and a skin cell osteoclasts, and macrophages.

133-134 (Cancelled)

135. (Currently Amended). The implant composition of claim 128 133, wherein the biologically active agent is selected from the group consisting of anti-AIDS substances, an anticancer substances, antibiotics, antiseptics, ACE inhibitors, adrenergic antagonists, antacids, immunosuppressants or immunomodulatory factors, anti-viral substances, enzyme inhibitors, neurotoxins, neurotransmitters, opioids, hypnotics, anti-viral substances, enzyme inhibitors, neurotoxins, muscle relaxants, anti-Parkinson substances, anti-spasmodics, tranquilizers, anti-convulsants, muscle relaxants, anti-Parkinson substances, anti-spasmodics, muscle contractants, anti-diarrheals, anti-emetics, laxatives, diuretics, miotics, anti-cholinergics, anti-glaucoma compounds, anti-parasite compounds, anti-protozoal compounds, anti-hypertensives, analgesics, anti-pyretics, anti-inflammatory agents, anti-motion sickness medications, local anesthetics, ophthalmics, prostaglandins, anti-depressants, anti-psychotic substances, anti-emetics, imaging agents, specific targeting agents, trophic factors, growth factors, neurotransmitters, cell response modifiers, and vaccines, compounds that enhance or allow ingrowth of the lymphatic network or nerve fiber, an endothelial growth factor (EGF), vitamins, hormones, and nucleic acids.

136. (Previously Presented) The implant composition of claim 128 wherein the calcium phosphate comprises a powder mixture of:

an amorphous calcium phosphate having a calcium to phosphate ratio (Ca:P) of 1.1:1.0 to 1.9:1.0; and

a calcium phosphate promoter selected to promote conversion of the amorphous calcium phosphate into a bioresorbable poorly crystalline apatitic (PCA) calcium phosphate.

- 137. (Previously Presented) The implant composition of claim 136 further comprising: a physiologically acceptable aqueous solution in an amount sufficient to hydrate the calcium phosphate and to form a calcium phosphate paste or putty.
- 138. (Previously Presented) The implant composition of claim 137 wherein the physiologically acceptable aqueous solution is selected from the group of water, buffered pH solution, saline solution, serum and tissue culture medium.
- 139. (Previously Presented) The implant composition of claim 136 wherein the calcium phosphate promoter comprises an acidic calcium phosphate.
- 140. (Currently Amended) The implant composition of claim 139 wherein the acidic calcium phosphate is selected from the group of calcium metaphosphate, dicalcium phosphate dihydrate, heptacalcium decaphosphate, tricalcium phosphate, calcium pyrophosphate dihydrate,

crystalline hydroxyapatite, calcium pyrophosphate, monetite, octacalcium phosphate, and poorly crystalline apatitic (PCA) calcium phosphate.

- 141. (Previously Presented) The implant composition of claim 128 wherein the overall calcium to phosphate ratio (Ca:P) of the calcium phosphate is less 1.5:1.0.
- 142. (Previously Presented) The implant composition of claim 136 wherein the amorphous calcium phosphate and the calcium phosphate promoter are present in about equal amounts by weight.
- 143. (Previously Presented) The implant composition of claim 136 wherein the calcium phosphate promoter comprises dicalcium phosphate dihydrate (DCPD).
- 144. (New) The implant composition of claim 128, wherein at least about 80% of said implant composition is resorbed within twelve months.
- 145. (New) The implant composition of claim 128, wherein at least about 80% of said implant composition is resorbed within nine months.
- 146. (New) The implant composition of claim 128, wherein at least about 80% of said implant composition is resorbed within six months.

- 147. (New) The implant composition of claim 128, wherein at least about 80% of said implant composition is resorbed within three months.
- 148. (New) The implant composition of claim 128, wherein at least about 80% of said implant composition is resorbed within one month.